

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

Jeffrey Cooper et al.

erial No.

10/581,151

iled

May 31, 2006

.: TECHNIQUE FOR FILM GRAIN SIMULATION USING A DATABASE OF FILM

GRAIN PATTERNS

Examiner

Not Yet Assigned

Art Unit

2812

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

[XX] 1 Pursuant to 37 CFR 1.97(b)

[within 3 months of filing or prior to 1st Office Action]

[]2 Pursuant to 37 CFR 1.97(c)

[before Final Office Action or Allowance]

[]3 Pursuant to 37 CFR 1.97(d)

[after Final Office Action or Allowance, but prior to payment of Issue Fee]]

Mail Stop Amendment Commissioner for Patents P. O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

The following are submitted in the above-identified application in compliance with 37 CFR 1.97 & 1.98:

A list of documents on form PTO/SB/08a and/or PTO/SB/08b together with copies of each identified document and a translation or a concise explanation of each non-English language document is enclosed herewith.

This paper is submitted in accordance with:

[XX] 5	37 CFR -	1.97(b):	[within 3 months of filing or prior to 1st Office Action]
[]6	37 CFR ⁻	1.97(c):	[before Final Office Action or Allowance, whichever is earlier]; and
	[] (a)	The requi	red certification made in item 8(a) below; OR
	[] (b)		.00 fee specified in 37 CFR 1.17(p) for submission ormation Disclosure Statement is authorized in item 9 below.
[]7	37 CFR	1.97(d):	[after Final Office Action or Allowance, but prior to payment of Issue Fee]; and
	[] (a)	The requi	red Certification made in item 8(a) below; AND
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		<u>C</u>	ertificate	of Mailing				
Patent Op P.O. Box	5312	ng LLC sey 08543-5312 7 67						
			Ву:	Respectfully submitted, JEFFREY COOPER ET AL. Robert B. Levy, Attorney Registration No. 28,234 (609) 734-6820				
[XX] 9	Please ch Statemen enclosed.	it to Deposit Acco	ole fees as unt No. <u>07</u>	sociated with the submittal of this Information Disclosure 7-0832. An original and one (1) copy of this document is				
	[] (b)	from a foreign pa of the person sig	atent office ning this o signated i	tained in this Statement was cited in a communication in a counterpart foreign application or, to the knowledge document after making reasonable inquiry, was known to n 37 CFR 1.56(c) more than three (3) months prior to the				
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[]8	Certificati	ion .						

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in a postage paid envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date indicated below.

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PTO/SB/08A (10-96)

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

C	Complete if Known					
Application Number	10/581,151					
Filing Date	05-31-2006					
First Named Inventor	COOPER ET AL.					
Group Art Unit	2812					
Examiner Name						
Attorney Docket Number	PU030308					

				U.S. PATENT DOCL	MENTS	
Examiner Initials	Cite No.1	U.S. Patent Docume Kind C (if kno		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US20020034337		SHEKTER	03-21-2002	
		US4935816		FABER	06-19-1990	
		US5140414		MOWRY	08-18-1992	
		US5335013		FABER	08-02-1994	
		US5374954		MOWRY	12-20-1994	
		US5406326		MOWRY	04-11-1995	
		US5457491		MOWRY	11-10-1995	
		US5471572		BUCHNER ET AL.	11-28-1995	
		US5475425		PRZYBORSKI ET AL.	12-12-1995	
		US5629769		COOKINGHAM ET AL.	05-13-1997	
		US5641596		GRAY ET AL.	06-24-1997	
		US5687011		MOWRY	11-11-1997	
		US5709972		COOKINGHAM ET AL.	01-20-1998	
		US5767860		ZIMMER ET AL.	06-16-1998	
		US5831673		PRZYBORSKI ET AL.	11-03-1998	
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Examiner Initials	Cite No.1	I man a historia mil		ument Kind Code ^s (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T6
		EР	EP0622000		FABER	10-15-1992		+
		EP	EP1175091		PRZYBORSKI ET AL.	01-23-2002		\top
		EΡ	EP1215624		EASTMAN KODAK COMPAN'	06-19-2002		\Box
		wo	WO0146992		BROWN UNIVERSITY RESEA	06-28-2001		
		wo	WO0177871		DEMOGRAFX	10-18-2001		
		wo	WO2004104931		THOMSON LICENSING S.A.	12-02-2004		\Box
		wo	WO9314591		FABER	07-22-1993	-	\Box
		wo	WO9520292		PRZYBORSKI ET AL.	07-27-1995		
		wo	WO9722204		PRZYBORSKI	06-19-1997		
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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13.15			VIO.01 0.011.D.T.	Application Number	10/581,151		
INFO	JRIVIA I 10.	N L	DISCLOSURE	Filing Date	05-31-2006		
STA	TEMENT	BY	APPLICANT	First Named Inventor	COOPER ET AL.		
				Group Art Unit	2812		
	(use as many	sheel	ts as necessary)	Examiner Name			
Sheet	2	of	3	Attorney Docket Number	PU030308		

	,	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
		, AL-SHAYKH ET AL, "Lossy Compression of Images Corrupted by Film Grain Noise," School of Electrical and Computer Engineering, 1996 IEEE.						
		, AL-SHAYKH ET AL, "Restoration of Lossy Compressed Noisy Images," IEEE Transactions on Image Processing, Vol. 8, No. 10, October 1999.						
		, AL-SHAYKH, "Lossy Compression of Noisy Images," IEEE Transactions on Image Processing, Vol. 7, No. 12, December 1998.						
		, BRIGHTWELL ET AL, "Automated Correction of Film Unsteadiness, Dirt and Grain," International Broadcasting Convention, September 16-20, 1994, Conference Publication No. 397, IEE, 1994.						
		, CAMPISI ET AL, "Signal-Dependent Film Grain Noise Generation Using Homomorphic Adaptive Filtering," IEE Proceedings, Image Signal Process, Vol. 147, No. 3, June 2000.						
		, ZHAO ET AL, "Constant Quality Rate Control for Streaming MPEG-4 Fgs. Video," Integrated Media Systems Center and Department of Electrical Engineering, University of Southern California, 2000 IEEE.						
		, CHAVEL ET AL, "Film Grain Noise in Partially Coherent Imaging," Optical Engineering, Vol. 19, No. 3, May- June 1980.						
		, FISCHER ET AL, "Image Sharpening Using Permutation Weighted Medians," Department of Electrical Engineering, University of Delaware, fischer@ee.udel.edu, paredesj@ee.udel.edu, arce@ee.udel.edu.						
		, ILLINGWORTH ET AL, "Vision, Image and Signal Processing," The Institution of Electrical Engineers, IEE Proceedings, June 2000, Vol. 147, No. 3.						
		, MCLEAN ET AL, "Telecine Noise Reduction," XP-002285972, 2001 The Institute of Electrical Engineers.						
		, OKTEM ET AL, "Transform Domain Algorithm for Reducing Effect of Film-Grain Noise in Image Compression," Electronics Letters, October 14, 1999, Vol. 35, No. 21.						
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PTO/SB/08B (10-96)

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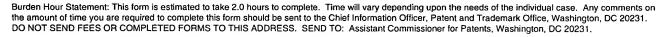
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Substitute for form 1449B/PTO				Complete if Known		
1815			NOO! 00!!PF	Application Number	10/581,151	
INF	JKIVIA 110	N L	DISCLOSURE	Filing Date	05-31-2006	
STA	TEMENT	BY	APPLICANT	First Named Inventor	COOPER ET AL.	
		_ •		Group Art Unit	2812	
(use as many sheets as necessary)				Examiner Name		
Sheet	3	of	3	Attorney Docket Number	PU030308	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS								
Examiner Initials	Cite No. ¹							
		, PENG ET AL, "Adaptive Frequency Weighting for Fine-Granularity-Scalability," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671, 2002 SPIE 0277-786X/02.						
		, PRADES-NEBOT ET AL, "Rate Control for Fully Fine-Grained Scalable Video Coders," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002), SPIE 0277-786X/02.						
		, SCHAAR ET AL, "Fine-Granularity-Scalability for Wireless Video and Scalable Storage," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02.						
		, SHAHNAZ ET AL, "Image Compression in Signal-Dependent Noise," Applied Optics, Vol. 38, No. 26, September 10, 1999.						
		, Visual Communication and Image Processing 2002, Proceedings of the SPIE, The International Society for Optical Engineering, Vol. 4672, pt. 1-2, 2002.						
		, YAN ET AL, "Efficient Video Coding with Hybrid Spatial and Fine-Grain SNR Scalabilities," Department of Electronic Engineering, Beijing Institute of Technology, China.						
		, YAN ET AL, "Film Grain Noise Removal and Generation for Color Images," Department Electrical and Computer Engineers, University of Toronto, dimitris@comm.toronto.edu.						
		, YAN ET AL, "Signal-Dependent Film Grain Noise Removal and Generation Based on Higher-Order Statistics," University of Toronto, Department of Electrical and Computer Engineering, dimitris@comm.toronto.edu, 1997 IEEE.						
		, YOSHIDA, "Go with the Grain, Film R&D Chief Urges, for Art's Sake," EE Times, February 07, 2005.						
		, ZHANG ET AL, "Constant Quality Constrained Rate Allocation for FGS Video Coded Bitstreams," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02.						

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